Appl. No. 10/650,338
Amdt. dated November 1, 2005
Reply to Office Action of August 22, 2005

PATENT

Amendments to the Specification:

Please replace the "Title" with the following amended title:

<u>DATA REPLICATION AMONG STORAGE SYSTEMS</u>

Please replace paragraph [0034] with the following amended paragraph:

[0034]   In the configuration of the first embodiment of the present invention, a host computer 180 and a first storage system 100A are connected by a connection path 190, and the storage system 100A is connected to a second storage system 100B holding a duplicate of the data retained in the storage system 100A with a connection path 200. In the explanation below, in order to distinguish between the first storage system 100 holding the data which is the object of replication and the second storage system 100 holding the replicated data, we call the storage system 100 holding the data, which is the object of replication, the original storage system 100A, and the storage system 100 holding the replicated data the secondary storage system 100B. The storage area of the storage system is managed by partitioning and we call the partitioned storage areas logical volumes 230. <u>As shown in Fig. 1, the logical volumes include DATA1 230-1, DATA2 230-2, JNL1 230-3, and DATA3 203-4 in the original storage system A 100A; and COPY1 230-5, COPY2 230-6, JNL2 230-7, and DATA1 230-8 in the secondary storage system B 100B.</u>

Please replace paragraph [0047] with the following amended paragraph:

[0047]   (4) Secondary storage system 100B reads the journal from journal logical volume (JNL2) in ascending order of update numbers using pointer information 700 and updates the date of secondary logical volume (COPY1) by the restore process 250 read-write process [[220]] <u>290</u> in FIG. 1.

DATA REPLICATION AMONG STORAGE SYSTEMS

CROSS-REFERENCES TO RELATED APPLICATIONS

[0001]   The present application claims priority to Japanese Patent Application No. 2003 183734, filed on June 27, 2003.

BACKGROUND OF THE INVENTION

[0002]   The present invention relates to a storage system, and more particularly to data replication among a plurality of storage systems.

A technology relating to data replication among storage systems becomes important for providing uninterrupted service to customers even when failure occurs in a first storage system. The following patent specifications have disclosed a technology for replicating the information stored in a first storage system to a second and third storage system.

[0003]   US Patent No. 5,170,480 discloses a technology by which a first computer connected to a first storage system transfers data stored in a first storage system to a second computer via a communication link between a first computer and the second computer, and the second computer transfers the data to a second storage system connected to the second computer.

[0004]   US Patent No. 6,209,002 discloses a technology by which a first storage system transfers data stored in a first storage system to a second storage system and the second storage system transfers the data to a third storage system. A computer is connected to the first storage system by a communication link, the first storage system is connected to

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